

OPW

Willows, California
July 1-2, 2004

APPENDIX III

STAFF REPORT BY MR. MICHAEL SAHLIN, SWRCB
FINAL ELD TEST
OPW EVR PHASE I EO VR-102-D

July 1-2, 2004
Willows Shell
1300 W. Wood
Willows, CA

In Attendance:

Mr. Michael Sahlin – SWRCB
Mr. Bill Kelso – Contractor, Ed Staub & Sons
Mr. Kevin Tokunaga – Glenn County
Mr. Rick Steward – Glenn County
Mr. Clarence Sullivan – Praxair Services Inc.
Mr. Roy Barrows – Praxair Services Inc.

This new UST facility is located on the Southwest corner of Wood Street and Humboldt Avenue. This facility is branded as a Shell but is privately owned and operated. Mr. Kevin Tokunaga of Glenn County was at the site on June 30, 2004 and verified that the OPW spill buckets were installed and torqued to the manufacturer's specifications. A helium pre-test was conducted by Praxair Services Inc. (PSI) on June 4, 2004.

On July 1, 2004, PSI arrived on-site at 7:30 AM to start setting up for the final test. The leak simulation was started at 9:30 AM by injecting Tracer "E" into the vent horizontal sampling probe (HSP) midway between the tanks. The leak simulation tracer was found in sufficient concentration to establish the Enhanced TracerTight® test (often referred to as ELD) timetable at 12.5 hours after inoculation for this UST facility. The vapor and primary product lines were inoculated at 2:00-2:30 PM with Tracer "W," the tanks were inoculated with Tracer "A" at 4:30 PM and pressurized with helium to 0.5 psi, vapor lines to 0.5 psi (Tracer A), and the product lines inoculated with Tracer "W" and pressurized to 50 psi. Mr. Rick Steward, Mr. Tokunaga, and Mr. Sahlin witnessed these events.

Mr. Tokunaga and Mr. Michael Sahlin witnessed PSI using their standard operating procedures to inoculate the vapor piping at the furthest point of the dispenser area and then collect vapor samples from the vent pipes to show that tracer gas was dispersed throughout the entire length of the vapor piping runs. Samples were collected from the secondary space of the vent and product piping and no tracer was detected. The vent and primary product piping passed by 7:30 PM on July 1, 2004. Samples were collected from the tank top sumps and the HSPs on July 2, 2004 and no tracer was detected. The tanks and entire UST facility passed on July 2, 2004.

See attachments:

- (A) Letter from Mr. Kevin Tokunaga with attachment: Site Identification Information portion of OPW EVR Phase I Equipment Installation Check List (Revised 03/15/04) initialed by Mr. Kevin Tokunaga
- (B) Completed OPW EVR Phase I Equipment Installation Check List (Revised 03/15/04)
- (C) PSI Job Log for final ELD test, July 1-2, 2004

County of Glenn

Air Pollution Control District

WILLIAM R. DUCKWORTH
Air Pollution Control Officer
Director: Unified Program

MARK D. BLACK
Assistant Air Pollution Control Officer
Unified Program

Willows Shell Enhanced Leak Detection Test (Final Test)
June 30-July 2, 2004

OPW EVR Phase I VR-102-D

Contractor: Ed Staub and Sons, Petroleum, Inc
Installer: Bill Kelso
PraxAir: Clarence Sullivan, Roy Barrow
Pre-Test: Dave Erickson, Jackson Julson
GCAPCD: Kevin Tokunaga
GCCUPA: Rick Steward

Torque Settings at the Vapor and Product risers

Torque settings on the product and vapor four inch nipples above the Face Seal Adaptor were observed and verified to be tightened at 160-165 ft pounds. A torque wrench was used in conjunction with a 1/2" to 3/4" drive adapter and the OPW 61SA Rotatable Adaptor Socket to verify torque settings.

Note: I cannot attest to the torque settings for the FSA-400 Face Seal Adaptor. To do so at this time would have required the removal of the spill bucket and thus compromised the results of the previously performed helium pre-test and the current ELD test. When the above torque settings were observed at 160-165 foot pounds I watched for any rotation below the nipple and did not see any movement. Although I cannot verify the FSA-400 to be torqued to 200 ft/lbs, I can verify it to be at least 160-165 ft pounds.

Summary: The tank system passed the ELD test after some minor leaking around the TLS riser on the 91 Premium tank was tightened. The TLS risers on both 87 Regular and 91 Premium were not in place during the previous "pre-test". The initial leak (on the final test) was not the result of leaking Phase I vapor recovery equipment.

See attached OPW EVR Phase I Equipment Installation Checklist

Kevin Tokunaga
Glenn County APCD

C:\Documents and Settings\KTOKUNAGA.AGWORLD\Desktop\Willows Shell Enhanced Leak Detection Test.doc

OPW
EVR Phase I Equipment
Installation Check List
(Revised 03/15/04)

Site Identification Information

Site Address: WILLOWS SHELL

1300 W. WOOD ST.

WILLOWS, CA. 95988

Installing Company: ED STAUB & SONS

Technician's Name (Print Clearly): BILL KELSO

Technician's Signature: Bill Kelso

Date of installation: 6-1-2004

1/2 ps for PRAX-AIR test on vapor line

supreme - vapor 160 ft/lb — RT 6/30/04
product 160 ft/lb RT 6/30/04

regular - vapor 160 ft/lb RT 6/30/04
product 160 ft/lb — RT 6/30/04

OPW
EVR Phase I Equipment
Installation Check List
(Revised 03/15/04)

Components Installed

OPW 500 Series EVR Fill Spill Containment Bucket	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
OPW 500 Series EVR Vapor Spill Containment Bucket	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
OPW 2100 Series EVR Fill Spill Containment Bucket	Yes <input type="checkbox"/>	No <input type="checkbox"/>
OPW 2100 Series EVR Vapor Spill Containment Bucket	Yes <input type="checkbox"/>	No <input type="checkbox"/>
OPW FSA-400 Threaded Riser Adaptor (Face Seal Adaptor)		
On Fill Riser (Required)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
On Tank Probe Riser (Required)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
On Vapor Riser (Optional)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
OPW 61SO 400 EVR Series Overfill Prevention Valve	Yes <input type="checkbox"/>	No <input type="checkbox"/>
OPW 61JSK Jack Screw Assembly	Yes <input type="checkbox"/>	No <input type="checkbox"/>
OPW 61VSA Vapor Swivel Adaptor	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
OPW 61SALP Fill Swivel Adaptor	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
OPW 634TT Top Seal EVR Fill Cap	Yes <input type="checkbox"/>	No <input type="checkbox"/>
OPW 1711T Top Seal EVR Vapor Cap	Yes <input type="checkbox"/>	No <input type="checkbox"/>
OPW 634LPC Low Profile Top Seal EVR Fill Cap	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
OPW 1711LPV Low Profile Top Seal EVR Vapor Cap	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

Installation acknowledgment

Installed OPW FSA-400 Threaded Riser Adaptor (Face Seal Adaptor) on fill riser and tightened to 200 ft. lb.

Thread sealant compound used PERMATEX THREAD SEALANT

Installed OPW FSA-400 Threaded Riser Adaptor (Face Seal Adaptor) on tank probe rise and tightened to 200 ft. lb.

Thread sealant compound used SAME

Optional:

Installed OPW FSA-400 Threaded Riser Adaptor (Face Seal Adaptor) on vapor riser and tightened to 200 ft. lb.

Thread sealant compound used SAME

Installed OPW 2100 Series ☐ or 500 Series ☒ Fill spill containment bucket onto FSA-400 attached to fill riser and tightened to 200 ft. lb.

Thread sealant compound used SAME

Installed OPW 00 Series _____ or 500 Series ☒ vapor spill containment bucket onto
vapor riser and tightened to 200 ft. lb.
Thread sealant compound used SAME

Assembled 61SO-400C-EVR Series overfill prevention valve

☒ Used OPW supplied epoxy Yes _____ No _____
Applied epoxy: To upper 1" inside of top tube; under cinch head bolts and lock
washers; on threads of valve body at lower tube connection.

Yes _____ No _____

Allowed epoxy to cure for 24 hours before exposure to fuel or vapor

Yes _____ No _____

☒ Installed OPW 61SO 400C-EVR Series overfill prevention valve into fill spill
containment bucket. Yes _____ No _____

Alternative to 61SO:

Installed OPW 61T Straight Drop Tube into fill spill containment bucket.

Yes ☒ No _____

Installed OPW 61JSK Jack Screw assembly on top of 61SO 400C-EVR Series overfill
prevention valve or 61T Straight Drop Tube.

Yes ☒ No _____

Lock-Tite applied to screws Yes ☒ No _____

Screws tightened to 3+ ft. lb.

Installed faced off 4" NPT pipe nipple in fill spill containment bucket and tightened
nipple to 160 ft. lb.

Thread sealant compound used SAME

Tool used to install nipple OPW 61SA

Installed faced off 4" NPT pipe nipple in vapor spill containment bucket and tightened
nipple to 160 ft. lb.

Thread sealant compound used SAME

Tool used to install nipple OPW 61SA

Installed OPW 61 SALP Fill Swivel Adaptor onto faced off 4" NPT pipe nipple in fill
spill containment bucket and tightened fill adaptor to 160 ft. lb.

Thread sealant compound used SAME

Tool used to install nipple OPW 61SA

Installed OPW 61 VSA Vapor Swivel Adaptor onto faced off 4" NPT pipe nipple in
vapor spill containment bucket and tightened vapor adaptor to 160 ft. lb.

Thread sealant compound used SAME

Tool used to install nipple OPW 61SA

OPW 61 SA-Tool used to install OPW components Yes ☒ No _____

MAKE SURE THAT
YOUR SITE AND
CLIENT INFO IS
ACCURATE -
DOUBLE CHECK
WITH OFFICE IF
UNSURE

ARRIVAL CHECK LIST

# Tanks	2 Tanks/1 split
# Dispensers	4

TANK INFO

Tank Product	Volume	Empty/Water/Fuel
87 Tank	12K	Empty
91 Tank	6K	Empty
DSL Tank	6K	Empty

PIPING INFO

	TYPE (Manufacture)	Helium / Vacuum
Product Lines	Pieces	Tracer W
VR / Vent	Smith	Tracer W
Flex	Pieces	Tracer W
Spill Buckets	OPW	
Shear Valves	OPW	Tracer W
Who Performed Pre-test!!	Praxair Svcs	

**List Issues encountered on check list and how resolved
(Contractor corrected, Reviewed by PM, Ect,)**

[illegible]

Date:

NEW CONSTRUCTION ELD - JOB LOG SUMMARY

TYPE OF TEST (Pretest, Final, Leak locate, Retest)		Probe Install? (Yes/No)	
Job Number:	37275NC		
Client:	ED Staub & Sons	Contact:	Bill Kelso
Site Name:	Shell	Phone:	530 521 5038
Site Address:	1300 W. Wood st.	Site Contact:	
City, State:	Willows, Ca	Phone:	

Crew:

Site Lead: Clarence Sullivan

Crew: Roy Barrow

					Total HRS	Billable Hrs	Initial	
Start Date:	1-Jul-04	Start Time:	7:30	End Time:	22:30	14.25	14.25	
Day Two Date:	2-Jul-04	Start Time:	7:30	End Time:		7.5	7.5	
Day Three Date:		Start Time:		End Time:				
Day Four Date:		Start Time:		End Time:				

MAKE NOTES IF YOU HAVE ANY UNBILLABLE HOURS

Total Billable Hours	21.75	Total Detected Leaks	
TEST RESULTS	Pass	Fail	Notes per item (Leaks should be covered under Leak log)
Product Primary	Pass		All products pass
Product Secondary			N/A
VR Primary	Pass		Primary VR and VENTs pass
VR Secondary			N/A
UDCs -#	4	Pass	All UDCs pass
Tanks (Includes Sumps)	Pass		All tank sumps pass

COMMENTS: (Leaks, unbillable hours, site specific info)

No tracer detections in HSP samples - Total 2 leaks found and repaired both in 91TS

Form Completed By: Clarence Sullivan

Date:

CA#

97-1604

Hours Approved By:

Signature:

QA Review By:

Date:

Time:

Daily Activity Log				Job#	37275NC		
Site:	Shell	Client:	ED Staub & Sons		Client Contact	Bill Kelso	
Site Address:		1300 W. Wood st.		Willows, Ca		Contact #	530 521 5038
Date:	1-Jul	Day #	1			Log Completed By:	C Sullivan / 97-1604
Leak/Pass	Time	ITEM	Test	Tested	Sample ID	Rate: (ug/L - ppm)	Description
0	7:30	Note	Note	Note	Note		on-site, met with client, reviewed site, Michael Salin onsite
0	8:00	Note	Note	Note	Note		Start set up of test connections- VR and vent lines can not pull vac on line for inoculation - will use pressure
0	8:30	HSP	Note	Note	Note		Reviewed HSP layout
0	9:30	LS	Final	LS	Start LS	TRACER E = LS	Introduced at point midway between tanks
0	10:00	Note	Note	Note			Start Calibration
0	11:00	Note	Note	Note	Note		Calibration instrument Complete
0	11:21	LS	Final	LS	Confirm LS	leak	Sample collected at location were LS was introduced
0	11:45	LS	Final	LS	Confirm LS- HSP 2	ND- E	Sample collected out of HSP 2
0	12:36	HSP	BG	HSP 2	BG-HSP2 5-15ft	ND-A,W	Sample collected BG
0	12:51	HSP	BG	HSP 2	BG-HSP2 20-35ft	ND-A,W	Sample collected BG
0	13:04	LS	Final	LS	Confirm LS	ND-E	Sample resampled at point of LS introduction
0	13:22	HSP	BG	HSP 2	BG-HSP2-40-55ft	ND-A,W	Sample collected BG
0	13:34	HSP	BG	HSP 2	BG-HSP2-60-75ft	ND-A,W	Sample collected BG
0	13:40	LS	Final	LS	Inoc	TRACER E = LS	Re-introduce LS in HSP 3
3	13:45	LS	Final	HSP	Confirm LS at LS point	Leak E	Confirmed LS introduced OK
0	13:58	HSP	BG	HSP 2	BG HSP2-80-95ft	ND-A,W	Sample collected BG
3	14:00	VRPL	Final	INOC	INOC	Inoculated	Inoculated
3	14:10	87PL	Final	INOC	Inoc	Inoculated	Inoculated
3	14:20	91PL	Final	INOC	Inoc	Inoculated	Inoculated
3	14:30	DSLPL	Final	INOC	Inoc	Inoculated	Inoculated
0	14:45	VRPL	Final	INOC	VRPL-UDC1 ver	Leak W	Sample collected from shear valve UDC1

Daily Activity Log				Job#	37275NC		
Site:	Shell	Client:	ED Staub & Sons		Client Contact	Bill Kelso	
Site Address:	1300 W. Wood st.		Willows, Ca		Contact #	530 521 5038	
Date:	1-Jul	Day #	1			Log Completed By:	C Sullivan / 97-1604
0	15:02	HSP	LS	HSP1	LS HSP1-5ft	ND-A,W, E	Collected LS
0	15:13	HSP	LS	HSP1	LS HSP1-5-20ft	ND-A,W, E	Collected LS
0	15:24	HSP	LS	HSP1	LS HSP1-25-30ft	ND-A,W, E	Collected LS
0	15:40	HSP	LS	HSP1	LS HSP1-45-50ft	ND-A,W, E	Collected LS
0	15:57	HSP	LS	HSP1	LS HSP1-55-60ft	ND-A,W, leak tracer E	Collected LS
3	16:06	UDC	Final	UDC1-2	UDC1-2	ND-W	Sample from UDC
3	16:12	UDC	Final	UDC3-4	UDC3-4	ND-W	Sample from UDC
3	16:19	UDC	Final	UDC5-6	UDC5-6	ND-W	Sample from UDC
3	16:24	UDC	Final	UDC7-8	UDC7-8	ND-W	Sample from UDC
3	16:29	VRPL	Final	1	87FVRS-Vent Sump	ND-W	sample collected
3	16:30	87TK	Final	INOC	Inoc	Inoc=Tracer A	Inoc Tracer A into tank
3	16:30	91TK	Final	INOC	Inoc	Inoc=Tracer A	Inoc Tracer A into tank
3	16:30	DSLTK	Final	INOC	Inoc	Inoc=Tracer A	Inoc Tracer A into tank
0	16:37	LS	LS	HSP1	HSP1-65-70ft	ND-E	Collected LS
0	16:49	LS	LS	HSP1	HSP1-75-80ft	ND-E	Collected LS
0	17:02	LS	LS	HSP1	HSP1-85-90ft	ND-E	Collected LS
0	17:12	LS	LS	HSP1	HSP1-95-100ft	ND-E	Collected LS
0	17:25	LS	LS	HSP1	HSP1-105-110ft	ND-E	Collected LS
0	17:34	LS	LS	HSP1	HSP1-115-120ft	ND-E	Collected LS
0	17:45	LS	LS	HSP1	HSP1-125ft	ND-E	Collected LS
3	18:06	87Vent	Final	1	87Vent-87fvrs	ND-A,W	Sample from Vent secondary at 87FVRS
3	18:13	91Vent	Final	1	91Vent-91FVRS	ND-A,W	Sample from Vent secondary at 91FVRS
3	18:26	DSLVent	Final	1	DSLvent-DSLFS	ND-A,W	Sample from Vent secondary at DSL fill Sump
3	18:33	87PL	Final	1	87TS-UDC1- 1	ND-A,W	TS-UDC
3	18:40	87PL	Final	1	81TS-UDC1- 2	ND-A,W	TS-UDC
3	18:46	91PL	Final	1	91TS-UDC1- 1	ND-A,W	TS-UDC

Daily Activity Log				Job#	37275NC		
Site:	Shell	Client:	ED Staub & Sons		Client Contact	Bill Kelso	
Site Address:		1300 W. Wood st.		Willows, Ca		Contact #	530 521 5038
Date:	1-Jul	Day #	1			Log Completed By:	C Sullivan / 97-1604
3	18:53	91PL	Final	1	91TS-UDC1 -2	ND-A,W	TS-UDC
3	18:59	DSLPL	Final	1	DSLTS-UDC5- 1	ND-A,W	TS-UDC
3	19:05	DSLPL	Final	1	DSLTS-UDC5- 2	ND-A,W	TS-UDC
3	19:11	VRPL	Final	1	VRPL-UDC 5-6	ND-A,W	87FVRS-UDC
3	19:17	VRPL	Final	1	VRPL-UDC 1-2	ND-A,W	87FVRS-UDC
3	19:22	VRPL	Final	1	VRPL-UDC 3-4	ND-A,W	87FVRS-UDC
3	19:28	VRPL	Final	1	VRPL- UDC7-8	ND-A,W	87FVRS-UDC
0	19:35	LS	LS	HSP1	HSP1-50ft	Leak	Sample to confirm LS
0	19:43	LS	LS	HSP1	HSP1-55ft	ND-E	Sample to confirm LS
0	19:52	LS	LS	HSP1	HSP1-60ft	ND-E	Sample to confirm LS
0	20:01	LS	LS	HSP1	HSP1-65ft	ND-E	Sample to confirm LS
0	20:09	LS	LS	HSP1	HSP1-8ft	ND-E	Sample to confirm LS
0	20:18	LS	LS	HSP1	HSP1-4ft	ND-E	Sample to confirm LS
0	21:33	LS	LS	HSP1	HSP1-45ft	ND-E	Sample to confirm LS
0	21:44	LS	LS	HSP1	HSP1-50ft	ND-E	Sample to confirm LS
0	21:53	LS	LS	HSP1	HSP1-55ft	ND-E	Sample to confirm LS
3	22:23	LS	LS	HSP2	HSP2-7ft	Leak	Sample to confirm LS
3	22:32	LS	LS	HSP2	HSP2-13ft	Leak	Sample to confirm LS
3	22:35	LS	Note	Note	Note		Two samples from the Inner Disp loop; found tracer E in sufficient quantities in both probes.
0	22:35	Note	Note	Note	Note		Off-site
Day Summary:			Tested all primary lines - products, vent and VR / Tested all UDCs - PASS				

Daily Activity Log				Job#	37275NC	
Site:	Shell		Client:	ED Staub & Sons	Client Contact	Bill Kelso
Site Address:		1300 W. Wood st.		Willows, Ca	Contact #	530 521 5038
Date:	2-Jul	Day #	2		Log Completed By:	C Sullivan - 97-1604
Leak/Pass	Time	ITEM	Test	Tested	Sample ID	Description
0	7:30	Note	Final	NOTE	NOTE	On-site began calibration; blowing out and covering sumps
0	8:52	Note	NOTE	NOTE	NOTE	GC Calibration Complete
3	9:48	HSP	Final	HSP1	HSP1-5-20ft	Sample collected from HSP
3	9:54	HSP	Final	HSP1	HSP1-25-40ft	Sample collected from HSP
3	10:02	HSP	Final	HSP1	HSP1-45-60ft	Sample collected from HSP
3	10:08	HSP	Final	HSP1	HSP1-65-80ft	Sample collected from HSP
3	10:14	91TK	Final	FVRS	91FVRS	Sample from Sump
1a	10:22	91TK	Final	TS	91 TS-1	Leak located in TS at riser to Tank. Tightened
3	10:34	87TK	Final	FVRS	87FVRS	Sample from Sump
3	10:44	87TK	Final	TS	87TS	Sample from Sump
3	10:51	DSLTK	Final	FS	DSLFS	Sample from Sump
3	11:12	DSLTK	Final	TS	DSLTS	Sample from Sump
3	11:26	HSP	Final	HSP1	HSP1-85-100ft	Sample collected from HSP
3	11:32	HSP	Final	HSP1	HSP1-105-120ft	Sample collected from HSP
3	11:40	HSP	Final	2-HSP	HSP2-5-20ft	Sample collected from HSP

Daily Activity Log				Job#	37275NC	
Site:	Shell		Client:	ED Staub & Sons	Client Contact	Bill Kelso
Site Address:		1300 W. Wood st.		Willows, Ca		Contact #
						530 521 5038
Date:	2-Jul	Day #	2			Log Completed By:
						C Sullivan - 97-1604
1b	11:49	91TK	Final	TS	91TS	Sample collected after one hr - second leak located at ball valve - contractor tightened and repaired
3	11:58	HSP	Final	2-HSP	HSP2-25-40ft	Sample collected from HSP
3	12:09	HSP	Final	2-HSP	HSP2-45-60ft	Sample collected from HSP
3	12:22	HSP	Final	2-HSP	HSP2-65-80ft	Sample collected from HSP
3	12:41	HSP	Final	2-HSP	HSP2-85-100ft	Sample collected from HSP
3	12:51	HSP	Final	2-HSP	HSP2-105-120ft	Sample collected from HSP
3	13:08	HSP	Final	2-HSP	HSP2-125-140ft	Sample collected from HSP
3	13:17	HSP	Final	2-HSP	HSP2-145ft	Sample collected from HSP
3	13:36	91TK	Final	TS	91TS	Sample after one hour - after repairs
3	14:00	HSP	Final	3-HSP	HSP3-5-20ft	Sample collected from HSP
3	14:06	HSP	Final	3-HSP	HSP3-25-40ft	Sample collected from HSP
3	14:17	HSP	Final	3-HSP	HSP3-45-60ft	Sample collected from HSP
3	14:23	HSP	Final	3-HSP	HSP3-65-80ft	Sample collected from HSP
3	14:30	HSP	Final	3-HSP	HSP3-85-100ft	Sample collected from HSP
3	14:37	HSP	Final	3-HSP	HSP3-105-120ft	Sample collected from HSP

Daily Activity Log				Job#	37275NC		
Site:	Shell		Client:	ED Staub & Sons	Client Contact	Bill Kelso	
Site Address:		1300 W. Wood st.		Willows, Ca	Contact #	530 521 5038	
Date:	2-Jul	Day #	2			Log Completed By:	C Sullivan - 97-1604
3	14:47	HSP	Final	4-HSP	HSP4-5-20ft	Sample collected from HSP	
3	14:54	HSP	Final	4-HSP	HSP4-25-40ft	Sample collected from HSP	
3	15:06	HSP	Final	4-HSP	HSP4-45-60ft	Sample collected from HSP	
3	15:18	HSP	Final	4-HSP	HSP4-65-80ft	Sample collected from HSP	
0	15:30	Note	NOTE	NOTE	NOTE	All systems pass	
0	16:00	Note	NOTE	NOTE	NOTE	Clean up- OFF SITE	
		Day Summary:					

LEAK LOG				Job#	37275NC		
Site:	Shell	Client:	ED Staub & Sons		Client Contact	Bill Kelso	
Site Address:	1300 W. Wood st.		Willows, Ca		Contact #	530 521 5038	
Test Dates	7/1-2/04				Log Completed By:	C Sullivan / 91-1604	
Leak/Pass	Time	ITEM	Test	Tested	Sample ID	Rate: (ug/L - ppm)	Description
1a	10:22	91TK	Final	TS	91 TS-1	leak	Leak located in TS at riser to Tank. Tightened
1b	11:49	91TK	Final	TS	91TS	leak	Sample collected - second leak located at ball valve - contractor tightened and repaired

Praxair Services, Inc.

Technical Solutions for the Industrial World.

UCISCO



Tracer Research Corrocon

CERTIFICATION OF ELDSM TRACER TIGHT® TEST RESULTS

Date: 7/1-2/2004

Job # 37275NC

Prepared For:

ED Staub & Sons
PO Box 506
Tullylake Ca 96134

Site Info:

Shell
1300 W. Wood st.
Willows, Ca

Test Time Period 4/12-15/04

		TRACER	STATUS
Diesel Tank & Sumps		A	Pass
87 Tank & Sumps		A	Pass
91 Tank & Sumps		A	Pass
Piping	87 Primary	W	Pass
Piping	91 Primary	W	Pass
Piping	Vapor Recovery/ Vent - Primary	W	Pass / Pass
Piping	Diesel - Primary	W	Pass
Piping	Diesel - Vent - Primary	W	Pass
Dispenser Sumps	4	W	Pass

Praxair Services Inc. certifies that the tank and product distribution lines listed in the above table have been tested by means of Enhanced Tracer Tight®. According to EPA standard test procedures for evaluating leak detection methods, the Enhanced Tracer Tight® method is capable of detecting leaks of ≥ 0.005 gallons per hour with a Probability of Detection (PD) of 0.95 and Probability of false alarm of < 0.05

Tester: Clarence Sullivan CA Lic. # 97-1604

Signature: <See Original For Signature> Date:

I declare under penalty of perjury that I am a licensed tank tester in the State of California and that the information contained in this report is true and correct to the best of my knowledge.

The following criteria are used for the classification of leakage based on the presence or absence of tracer.

PASS

Criteria:
No Tracer Detected

FAIL

Criteria:
Tracer Detected

Office use only

Certification Confirmed by: _____ Date: